




UNITED STATES PATENT AND TRADEMARK OFFICE


UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/067,632

02/04/2002

Corey S. Goodman

B94-002-8

3003

20350

7590

04/14/2006

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

WANG, CHANG YU

ART UNIT

PAPER NUMBER

1649

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,632

Applicant(s)

GOODMAN ET AL.

Examiner

Chang-Yu Wang

Art Unit

1649

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/04/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION
Status of Application/ Election/Restrictions

Applicant's election **without** traverse of Group I in the reply filed on March 31, 2006 is acknowledged.

Claim 24 is pending and under examination in this office action. Claims 1-23 are cancelled.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Obviousness-Type Non-Statutory Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 1649

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent Nos. 5639856 ('856) and 6013781 ('781). Although the conflicting claims are not identical, they are not patentably distinct from each other. The instant claim encompasses a composition comprising SEQ ID NO:54 and a physiologically acceptable carrier. The claims 1-18 of '856 encompasses an isolated semaphorin protein comprising SEQ ID NOs:54, 56, 58, 60, 62, 64 or other SEQ ID NOs, which are parts of SEQ ID NO:54 with the specific binding activity of Semaphorin. The claims 1-18 of '781 encompass an isolated DNA encoding a semaphorin protein comprising SEQ ID NOs:54, 56, 58, 60, 62, 64 or other SEQ ID NOs, which are parts of SEQ ID NO:54 with the specific binding activity of Semaphorin. The claims of '856 and the claims of '781 encompass SEQ ID NO:54 and sequences other than SEQ ID NO:54. Although the scope is not the same, the claimed products of SEQ ID NO:54 in the '856 and the DNA encoding for SEQ ID NO: 54 patented in the '781 are not distinct from the instant claim because the major component of the instant claim is SEQ ID NO:54. While not identical, the claims of the instant application and the '856 and '781 encompass the same product of SEQ ID NO:54 of inventions. Thus the instant application and the '856 and '781 claim the same and non-distinct inventions of a composition comprising SEQ ID NO:54. The sequence search results disclose as follows:

US-08-121-713D-54
; Sequence 54, Application US/08121713D

Art Unit: 1649

Patent No. 5639856
; GENERAL INFORMATION:
; APPLICANT: Goodman, Corey S.
; APPLICANT: Kolodkin, Alex L.
; APPLICANT: Matthes, David
; APPLICANT: Bentley, David R.
; APPLICANT: O'Connor, Timothy
; TITLE OF INVENTION: The Semaphorin Gene Family
; NUMBER OF SEQUENCES: 100
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
; STREET: 268 Bush Street, Suite 3200
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/121,713D
; FILING DATE: 13-SEP-1993
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A.
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: B94-002-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415)343-4341
; TELEFAX: (415) 343-4342
; TELEX:
; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 771 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-121-713D-54

```

Query Match          100.0%;  Score 4201;  DB 1;  Length 771;
Best Local Similarity 100.0%;  Pred. No. 0;
Matches 771;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps
0;

```

[illegible]

Art Unit: 1649

Qy	121	LKAYNQTHLYACGTGAFHPICITYIEIGHHPEDNIFKLENSHFENGGRGKSPYDPKLLTASL	180
Db	121	LKAYNQTHLYACGTGAFHPICITYIEIGHHPEDNIFKLENSHFENGGRGKSPYDPKLLTASL	180
Qy	181	LIDGELYSGTAADFMGRDFAIFRTLGHHPHPIRTEQHDSRWLNNDPKFISAHLISESDNPED	240
Db	181	LIDGELYSGTAADFMGRDFAIFRTLGHHPHPIRTEQHDSRWLNNDPKFISAHLISESDNPED	240
Qy	241	DKVYFFFRENAIDGEHSGKATHARIGQICKNDFGGHRSVLNKWTTFLKARLICSVPGPNG	300
Db	241	DKVYFFFRENAIDGEHSGKATHARIGQICKNDFGGHRSVLNKWTTFLKARLICSVPGPNG	300
Qy	301	IDTHFDELQDVFLMNFKDPKNPVVYGVTFTSSNIFKGSACVMSMSDVRVFLGPHYAHRD	360
Db	301	IDTHFDELQDVFLMNFKDPKNPVVYGVTFTSSNIFKGSACVMSMSDVRVFLGPHYAHRD	360
Qy	361	GPNYQWVPYQGRVPYPRPGTCPSKTFGGFDSTKDLRDDVITFARSHPAMYNPVFPMNNRP	420
Db	361	GPNYQWVPYQGRVPYPRPGTCPSKTFGGFDSTKDLRDDVITFARSHPAMYNPVFPMNNRP	420
Qy	421	IVIKTDVNYQFTQIVVDRVDAEDGQYDVMFIGTDVGTVLKVVSIPKETWYDLEEVLLLEEM	480
Db	421	IVIKTDVNYQFTQIVVDRVDAEDGQYDVMFIGTDVGTVLKVVSIPKETWYDLEEVLLLEEM	480
Qy	481	TVFREPTAISAMELSTKQQQLYIGSTAGVAQLPLHRCDIYGKACAECCLARDPYCAWDGS	540
Db	481	TVFREPTAISAMELSTKQQQLYIGSTAGVAQLPLHRCDIYGKACAECCLARDPYCAWDGS	540
Qy	541	ACSRYPPTAKRRTRRQDIRNGDPLTHCSDLHHDNHHGHSPEERIIYGVENSSSTFLECSPK	600
Db	541	ACSRYPPTAKRRTRRQDIRNGDPLTHCSDLHHDNHHGHSPEERIIYGVENSSSTFLECSPK	600
Qy	601	SQRALVYWQFQRRNEERKEEIRVDDHIIRTDQGLLLRSLQQKDSGNYLCHAVEHGFIQTL	660
Db	601	SQRALVYWQFQRRNEERKEEIRVDDHIIRTDQGLLLRSLQQKDSGNYLCHAVEHGFIQTL	660
Qy	661	LKVTLEVIDTEHLEELLHKDDDDGSGSKTKEMSNSMTPSQKVWYRDFMQLINHPNLNTMDE	720
Db	661	LKVTLEVIDTEHLEELLHKDDDDGSGSKTKEMSNSMTPSQKVWYRDFMQLINHPNLNTMDE	720
Qy	721	FCEQVWKRDRKQRRQRPGHTPGNSNKWKHLQENKKGRNRRTHEFERAPRSV	771
Db	721	FCEQVWKRDRKORRORPGHTPGNSNKWKHLOENKKGRNRRTHEFERAPRSV	771

US-08-833-391-54

; Sequence 54, Application US/08833391

; Patent No. 6013781

; GENERAL INFORMATION:

APPLICANT: Goodman, Corey S.

APPLICANT: Kolodkin, Alex L.

; APPLICANT: Matthes, David

; APPLICANT: Bentley, David R.

; APPLICANT: O'Connor, Timothy
 ; TITLE OF INVENTION: The Semaphorin Gene Family
 ; NUMBER OF SEQUENCES: 100
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
 ; STREET: 268 Bush Street, Suite 3200
 ; CITY: San Francisco
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/833,391
 ; FILING DATE:
 ; CLASSIFICATION: 530
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/121,713
 ; FILING DATE: 13-SEP-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Osman, Richard A.
 ; REGISTRATION NUMBER: 36,627
 ; REFERENCE/DOCKET NUMBER: B94-002-1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415)343-4341
 ; TELEFAX: (415) 343-4342
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 54:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 771 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 US-08-833-391-54

```

Query Match          100.0%;  Score 4201;  DB 2;  Length 771;
Best Local Similarity 100.0%;  Pred. No. 0;
Matches 771;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps
0;

```

[illegible]

Art Unit: 1649

Qy	181	LIDGELYSGTAADFMRDFAIFRTLGHHPPIRTEQHDSRWLNNDPKFISAHLISESDNPED	240
Db	181	LIDGELYSGTAADFMRDFAIFRTLGHHPPIRTEQHDSRWLNNDPKFISAHLISESDNPED	240
Qy	241	DKVYFFFRENAIDGEGHSGKATHARIGQICKNDFGGHRSVLNKKWTTFLKARLICSVPGPNG	300
Db	241	DKVYFFFRENAIDGEGHSGKATHARIGQICKNDFGGHRSVLNKKWTTFLKARLICSVPGPNG	300
Qy	301	IDTHFDELQDVFLMNFKDPKNPVVYGVFTTSSNIFKGSAVCMYSMSDVRRVFLGPYAHRD	360
Db	301	IDTHFDELQDVFLMNFKDPKNPVVYGVFTTSSNIFKGSAVCMYSMSDVRRVFLGPYAHRD	360
Qy	361	GPNYQWVPYQGRVPYPRPGTCPSKTFGGFDSTKDLRDDVITFARSHPAMYNPVFPMNNRP	420
Db	361	GPNYQWVPYQGRVPYPRPGTCPSKTFGGFDSTKDLRDDVITFARSHPAMYNPVFPMNNRP	420
Qy	421	IVIKTDVNYQFTQIVVDRVDAEDGQYDVMFIGTDVGTVLKVVSI PKETWYDLEEVLL EEM	480
Db	421	IVIKTDVNYQFTQIVVDRVDAEDGQYDVMFIGTDVGTVLKVVSI PKETWYDLEEVLL EEM	480
Qy	481	TVFREPTAISAMELSTKQQQLYIGSTAGVAQLPLHRCDIYGKACAECCLARDPYCAWDGS	540
Db	481	TVFREPTAISAMELSTKQQQLYIGSTAGVAQLPLHRCDIYGKACAECCLARDPYCAWDGS	540
Qy	541	ACSRYPFTAKRRTRRQDIRNGDPLTHCSDLHHDNHHGHSPEERIIYGVENSSTFLECS PK	600
Db	541	ACSRYPFTAKRRTRRQDIRNGDPLTHCSDLHHDNHHGHSPEERIIYGVENSSTFLECS PK	600
Qy	601	SQRALVYWQFQRRNEERKEEIRVDDHII RTDQGLLLRSLQQKDSGNYLCHAVEHGFIQTL	660
Db	601	SQRALVYWQFQRRNEERKEEIRVDDHII RTDQGLLLRSLQQKDSGNYLCHAVEHGFIQTL	660
Qy	661	LKVTLEVIDTEHLEELLHKDDDDGDGSKTKEMSNSMTPSQKVWYRDFMQLINH PNLNTMDE	720
Db	661	LKVTLEVIDTEHLEELLHKDDDDGDGSKTKEMSNSMTPSQKVWYRDFMQLINH PNLNTMDE	720
Qy	721	FCEQVWKRDRKQRRQRP GHTPGNSNKWKHLQENKKGRNRRTHEFERAPRSV	771
Db	721	FCEOVWKRDRKORRORP GHTPGNSNKWKHLOENKKGRNRRTHEFERAPRSV	771

Conclusion

NO CLAIM IS ALLOWED.

Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Papers relating to this application may be submitted to Technology Center 1600, Group 1649 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chang-Yu Wang, Ph.D. whose telephone number is (571) 272-4521. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, Ph.D., can be reached at (571) 272-0867.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CYW
April 7, 2006


JANET L. ANDRES
SUPERVISORY PATENT EXAMINER